

***EFFECT OF MORINGA LEAF EXTRACT CONCENTRATION ON
THE GROWTH OF SUGARCANE BUD CHIP SEEDS***
Supervised by Ir. Titien Fatimah, M.P

Hilmi Hidayatuallah

Program Studi Budidaya Tanaman Perkebunan
Jurusan Produksi Pertanian

ABSTRACT

Sugarcane (Saccharum officinarum. L) is one of the commodities used as a raw material for sugar production. Improving the sugarcane seedling cultivation system in an effective, efficient and environmentally friendly manner needs to be improved to spur the growth of good sugarcane seedlings, one of which is by using natural Growth Regulatory Substances (ZPT). The research was conducted to determine the effect of giving concentrations of Moringa leaf extract on the growth of sugarcane budchips. This research will be conducted in Kencong District, Gumukmas Village, East Java Province, which will be carried out from February 2023 to May 2023. This study used a non-factorial Randomized Block Design (RBD), namely by using the ZPT treatment of Moringa leaf extract which consisted of 6 levels (each level consisted of 4 samples of sugarcane seeds) using 4 repetitions so that a total of 96 experimental sample. If there is a significant effect, then a further test is carried out using the least significant difference (LSD) method at the 5% level. The treatment of natural ZPT had no significant effect on all parameters of the growth of sugarcane bud chip seedlings. The treatment of different doses did not significantly affect all parameters. The results showed that watering sugarcane bud chips with Moringa leaf extract at a concentration of 100 ml/liter effectively affected the growth of sugarcane seedlings var. PS 862 with the highest number of offspring and survival percentage.

Keywords: sugarcane, ZPT, Moringa leaf extract.